



## A Scoping Review of Green Supply Chain and Company Performance

Endah Prawesti Ningrum<sup>1\*</sup>, Arissetyanto Nugroho<sup>2</sup>, Darmansyah<sup>3</sup>, Nurmala Ahmar<sup>4</sup>

<sup>1,2,3,4</sup>*Doctoral Program in Economics, University of Pancasila, Jakarta, Indonesia*

*\*Corresponding author email: [endah.prawesti@dsn.uharajaya.ac.id](mailto:endah.prawesti@dsn.uharajaya.ac.id)*

---

### Abstract

Environmental pollution is a serious problem that can cause the extinction of living things on earth if it is not addressed immediately. Implementing a green supply chain is one form of company attention to answer these demands. This research aims to analyze the influence of green supply chains on company performance. This research was carried out using the literature review method by reviewing various previous studies contained in various electronic journal or literature search databases. The results of this research found that the green supply chain is an important strategy for achieving sustainable development for companies. The biggest driving factors for implementing a green supply chain usually come from outside the company, namely government regulations and environmentally conscious customers. Companies must also evaluate product design and production techniques and presentation in order to produce products that are more environmentally friendly.

*Keywords:* Supply Chain, Green Supply Chain, Company Performance.

---

### 1. Introduction

In this era of globalization, many new companies have emerged in similar fields, causing business competition to become increasingly fierce. Today's business competition is not just ordinary competition, but has reached the level of competition between supply chains by adding value to products and services. In global competition, environmental aspects influence a company's economic results. Companies not only achieve significant savings, but also increase sales, market share and use new marketing opportunities to increase profit margins, all of which contribute to the company's financial performance (Rao and Holt, 2005). One of the biggest challenges in the industrial world is ensuring that customer needs are met, business operations run smoothly and goals are achieved without damaging the environment. This challenge is an important issue in the industrial world that is needed to immediately implement sustainable practices in the supply chain. to meet the company's social, economic and environmental needs (Purnomo et al., 2019). Rapid economic growth and massive industrial expansion have caused people to tend to consume and use natural resources more quickly than before. At the same time, development and the resulting pollution cause enormous environmental damage, which can damage the ecology (Fleury and Davies, 2012).

Environmental pollution is a serious problem that can cause the extinction of living things on earth if it is not addressed immediately. Several sectors that continue to grow and contribute to global environmental degradation include industrial processes, transportation, waste, agricultural products, electricity generation, biogas cultivation and burning, fossil fuels, housing, tourism and others (Rohdayatin et al., 2018a). Every company cannot simply ignore this environmental problem, but must take responsibility for waste so that it can reduce environmental pollution. Companies that care about the environment influence high consumer awareness, so that the level of competition in the market is no longer focused on quality, price and delivery, but on environmental issues. This certainly requires companies to pay serious attention to supply chain management.

Green Supply Chain is the management of various activities to obtain raw materials and distribute final products to retailers, wholesalers and then the results of these goods will be sent to customers or consumers who have been distributed to markets. Green Supply Chain aims to eliminate or minimize waste (energy, gas emissions, hazardous chemicals and other waste) in the supply chain (Hidayat et al., 2023).

The performance measurement system is a process of monitoring and controlling, communicating organizational goals to functions in the supply chain, understanding how the organization's position is reactive to roles and achieving specified goals to increase competitiveness (Mustaniroh et al., 2019). Green Supply Chain is a sustainability performance measurement concept that integrates environmental aspects into the supply chain flow, starting from product design, raw material procurement, production operations, product delivery to consumers, and product end use

management (Purnomo et al., 2019). Concern A company's environmental impact can be done by reducing the waste produced in the supply chain work process. According to the Zero Waste organization, waste indicates company inefficiency, or it can also be called hidden resources. This minimizes existing waste so that companies can save more costs.

## 2. Research Method

This research is a literature review of various previous studies related to green supply chain variables and company performance variables. Previous research to be reviewed was collected by manual search via Google Scholar and Research Gate then cited using Mendeley reference. Keywords used in searching for previous research data include: "green supply chain", "supply chain", "green supply", "green supply chain", "performance", "company performance"

## 3. Theoretical Review

### 3.1. Green Supply Chain (GSC)

Green Supply Chain is an important strategy to reduce environmental risks while increasing a company's competitiveness and market value (Regina and Hasnawati, 2022). Supply chains are essentially strategic alliances between companies with different core production businesses that have established long-term cooperative relationships. have a strong orientation towards the direction of change (Zhang and Yousaf, 2020). in an industrial environment. Since the introduction of the concept of green development, the focus of society has been on the study of green supply chains and the evolution of green coordination contracts in relation to various environmental factors.

(Yang and Zhang, 2012) stated that the potential goal of green procurement is to eliminate waste, and purchasing departments will focus on value by comprehensively considering total costs in the waste elimination process, which should focus on business waste disposal activities. Typically, this can save more costs at the source of the supply chain to prevent waste than at the end of the supply chain. Purchasing activities are the main starting point for eliminating waste, which is a key factor in the success of greening purchasing is the company's recycling conditions and reuse of waste.

### 3.2. Company Performance

Company performance is a tool for measuring management's success in managing company resources to create value for shareholders or stakeholders (Simbolon, n.d.). It determines business performance measures including growth, profit and is measured by asking respondents to indicate the level of change in revenue performance, sales profit performance in three years (Muhajir et al., n.d.). Two indicators that have been widely used and popularized in business studies. Specifically, the authors argue that performance refers to how well a business can achieve its market-oriented and financial goals (Regina and Hasnawati, 2022).

Measuring a company's operational performance requires a deep understanding of operational management concepts. In today's increasingly competitive era, operations management is a series of activities that produce value in the form of goods and services by converting inputs into outputs (Jumady and Pono, 2016). Performance measures are metrics designed to measure the performance of an activity, job or industry in general. In other words, performance measurement determines how well a particular function or part of the company and the people who work in it achieve predetermined goals, both general and specific (Jumady and Pono, 2016).

## 4. Discussion and Result

The results of the review of 9 previous studies show that there is an influence of the green supply chain on company performance, both financial performance, operational performance and also environmental performance. Research conducted by Regina and Hasnawati (2022) revealed that the green supply chain has a significant effect on the company's operational performance. Green supply chain is an important strategy for companies to reduce environmental risks while increasing competitiveness and market value. Green supply chains certainly have a direct impact on the company's organizational ability to achieve its strategic goals. Due to increasing corporate awareness of the importance of environmental issues, the value of goods has become highly dependent on the quality of the raw materials used, making supplier selection an important part of the green supply chain.

According to Gawusu et al., (2021), Migdadi (2019), Zou et al., (2021) Researchers have developed the concept of supply chain management to a more effective concept that is more concerned with the environment. A green supply chain is a process that can be effective in considering environmental issues Anvari (2021), Hafezalkotob (2019), Jazairy (2020), Lähdeaho et al., (2020) and its practice in all work processes in each company, so the concept of a green supply chain has emerged with the acceleration of government regulations and regulations to be achieved Habib et al., (2020), Jafarzadeh Ghouschi et al., (2018), Rebs et al., (2018). Green supply chains are intended to reduce environmental risks and negative environmental impacts while increasing ecological efficiency Irani et al., (2017),

Jazairy (2020), Masudin et al., (2018) and eliminating environmental waste in organizations Chanchaichujit (2020), Irani et al., (2017), Nazam et al., (2020).

**Table 1:** Previous research on Green Supply Chains and Environmental Performance

No	Author	Outcome	Result	Type of Research
1	Nugraha and Hendayana (2020)	Corporate Environmental Performance	Internal Green Supply Chain Management and GSCM partially have an influence on the Environmental Performance of The Body Shop in Bandung City.	Quantitative
2	Jumady and Fajriah (2020)	Company competitiveness and company performance	Green supply chain has a significant effect on company competitiveness and company performance.	Quantitative
3	Djunaidi et al., (2018)	Implementation of Green Supply Chain in the Wood Furniture Industry	Factors that influence the implementation of GSC in the wooden furniture industry in Indonesia are consumer behavior, support from top management, and organizational strategy.	Quantitative
4	Regina and Hasnawati (2022)	Company performance	Green Supply (GSC) has a significant effect on company performance.	Qualitative
5	Eltayeb (2010)	Driving factors for environmentally friendly purchases	Customer pressure is one of the drivers that has a significant influence on green buying in manufacturing companies in Malaysia	Quantitative
6	Rohdayatin et al., (2018)	Environmental performance and financial performance	Green supply chains have an influence on financial performance and environmental performance	Qualitative
7	Sayyadi Tooranloo et al., (2018)	Evaluating green supply chain agility indicators	Supplier and customer relationships, performance, marketing and process integration are the most important factors influencing green supply chain agility.	Quantitative
8	Lestari and Dinata (2019)	Environmental Management Evaluation Based on ISO 14001 Certification	The indicator that has the most influence on environmental management performance is measuring and controlling waste quality.	Quantitative
9	Yang and Zhang (2012)	Environmentally friendly purchasing factors in China	The government must build environmentally friendly companies, create a green corporate culture, build corporate environmentally friendly purchasing management strategies, cultivate qualified environmentally friendly purchasing personnel	Quantitative
10	Li and Zhu (2023)	Green Supply Chain	Wholesale prices and repurchase prices increase manufacturers' proposition of research and development costs for environmentally friendly products, but reduce the efficiency coefficient of emission reduction or carbon trading price.	Quantitative
11	Moreira et al., (2022)	Green Supply Chain	While their GSC practices improve environmental performance, they still require more resources focused on green, ecocentric and sustainable strategies to address environmental and competitive challenges.	Quantitative
12	Bai et al., (2023)	Implementation of a green supply chain based on financial incentives with emission limits	To achieve optimal emission reductions, government subsidies are needed to increase profits in the supply chain.	Quantitative
13	Zhang and Yousaf (2020)	Green supply chain in the oil industry	Larger subsidies result in higher levels of environmental improvement in decentralized supply chains.	Quantitative
14	Hijjawi (2022)	Impact green supply chain	There is no impact of green purchasing, green production and green distribution on supply chain performance.	Quantitative
15	Gonzalez et al., (2022)	Green supply chain practices	Institutional pressure has a significant influence on the market orientation strategy adopted by companies. Market orientation and managerial commitment have a significant impact on the adoption of environmentally friendly supply chain practices.	Quantitative

Research conducted by Eltayeb and Zailani (2010) states that customer pressure is one of the driving forces. This has significant implications for environmentally friendly purchases. Companies need to consider putting pressure on their suppliers to initiate “green multiplier effects” that help in spreading green supply chain concepts among a large number of suppliers. Pressure from large companies as an effective way to spread environmentally friendly initiatives because these large companies often have thousands of suppliers. These suppliers are forced to meet environmental requirements to maintain contracts with large companies (Eltayeb and Zailani, 2010).

The results of research conducted by Rohdayatin et al., (2018) found that green supply chains have a significant impact on company environmental performance. These findings indicate that an environmentally friendly supply chain is important for companies to increase their company's level of environmental protection. The better the environmentally friendly supply chain management, the better the level of environmental protection or the company's concern for the surrounding environment. The goal of a green supply chain is to limit waste in restaurants and prevent the entry of hazardous and toxic waste (B3 waste) into the environment. This research is in line with research conducted by Shukla (2017) which states that implementing a green supply chain has a positive impact on environmental, economic and organizational performance for stakeholders.

Research conducted by Sayyadi Tooranloo et al., (2018) shows that the factors of relationships with suppliers and customers, performance, marketing and process integration are the most important factors influencing environmentally friendly supply chain agility and the IT and Intellectual Capital factors have the lowest relative importance. in the evaluation of green supply chain agility indicators. Therefore, companies can achieve an agile green supply chain by supporting information integration through collaborative planning and sharing of critical information. In fact, they can obtain high-quality and very valuable information in this regard by sharing important information and developing collaborative plans taking into account the standard environment for the production and supply of products and services.

Research conducted by Yang and Zhang (2012) states that the purchasing environment and the special ways in which purchasing managers act can contribute to a company's environmental initiatives. The government must build environmentally friendly corporate organizations, create a green corporate culture, build corporate environmentally friendly purchasing management strategies, develop qualified environmentally friendly purchasing personnel so that the negative influence that impacts environmental purchasing activities is minimized. The indicators that most influence environmental management performance are measuring and controlling waste quality. Regular measurements are needed so that the company's environmental management performance is maintained and improved in the future (Lestari and Dinata, 2019).

## 5. Conclusion

Green Supply Chain is an important strategy to achieve sustainable development for companies. Implementing an environmentally friendly supply chain is important because until now supply chain performance metrics generally do not pay attention to environmental impacts. Companies that implement a green supply chain have higher value and good competitiveness, but many companies still experience obstacles in implementing it, some have not even implemented it.

Green supply chains are influenced by several indicators, including green purchasing, green relations with customers and suppliers, green marketing, integrity of the green process, green information technology (Sayyadi Tooranloo et al., 2018)

Green supply chains certainly have a direct impact on the company's organizational ability to achieve its strategic goals. Due to the increasing awareness of companies about the importance of environmental issues, the value of goods has become highly dependent on the quality of the raw materials used. The biggest drivers for implementing a green supply chain usually come from outside the company, namely government regulations and environmentally conscious customers. Companies that face obstacles in implementing green supply chains in upstream and downstream activities require top management commitment to ensure good cooperation between all parties involved in supply chain management. Companies must also evaluate product design and production techniques and presentation in order to produce products that are more environmentally friendly.

## References

- Bai, S., Wu, D., & Yan, Z. (2023). Operational decisions of green supply chain under financial incentives with emission constraints. *Journal of Cleaner Production*, 389, 136025. <https://doi.org/10.1016/j.jclepro.2023.136025>
- Eltayeb, T. K., & Zailani, S. (2010). Investigation on the drivers of green purchasing towards environmental sustainability in the Malaysian manufacturing sector. *International Journal of Procurement Management*, 3(3), 316–337. <https://doi.org/10.1504/IJPM.2010.033448>
- Fleury, A. M., & Davies, benjamin. (2012). Sustainable supply chains—minerals and sustainable development, going beyond the mine. *Resources Policy*, 37(2), 175–178.

- Gonzalez, C., Agrawal, V., Johansen, D., & Hooker, R. (2022). Green supply chain practices: The role of institutional pressure, market orientation, and managerial commitment. *Cleaner Logistics and Supply Chain*, 5. <https://doi.org/10.1016/j.clscn.2022.100067>
- Hidayat, Mumtaz, & Hasibuan. (2023). Developing Strategic Planning Of Green Supply Chain In Refinery CPO Company. " *IOP Conference Series: Materials Science and Engineering* , 309(01).
- Hijjawi, G. S. (2022). Impact of Green Supply Chain on Supply Chain Performance. *WSEAS Transactions on Business and Economics*, 19, 441–452. <https://doi.org/10.37394/23207.2022.19.40>
- Jumady, E., & Pono, M. (2016). The Effects of Integrative Supply Chain Management on the Just in Time and Competitiveness of the Food and Beverage Manufacturing Companies in Makassar Nurdin Brasit. *Scientific Research Journal (SCIRJ)*, IV, 25. [www.scirj.org](http://www.scirj.org)
- Lestari, F., & Dinata, R. S. (2019). Green Supply Chain Management for Environmental Management Evaluation Based on ISO 14001 Certification. *Industria: Journal of Technology and Management Agroindustry*, 8(3), 209–217. <https://doi.org/10.21776/ub.industria.2019.008.03.5>
- Li, X., & Zhu, G. (2023). Green Supply Chain Coordination Considering Carbon Emissions and Product Green Level Dependent Demand. *Mathematics*, 11(10). <https://doi.org/10.3390/math11102355>
- Moreira, A. C., Ribau, C. P., & Rodrigues, C. da S. F. (2022). Green supply chain practices in the plastics industry in Portugal. The moderating effects of traceability, ecocentricity, environmental culture, environmental uncertainty, competitive pressure, and social responsibility. *Cleaner Logistics and Supply Chain*, 5. <https://doi.org/10.1016/j.clscn.2022.100088>
- Muhajir, Mukaromah, Hajar, Fathudin, Purwanti, Kristi, Ansori, Yazid, Fahlevi, Rosmayanti, Siiti, Tanjung, Rahman, Hedy, Ratu, Budiharti, Syahdina, & Purwanto, A. (n.d.). *The role of buzz and viral marketing strategic on purchase intention and supply chain performance. Uncertain Supply Chain Management*.
- Mustaniroh, S. A., Alvian, Z., Kurniawan, F., & Deoranto, P. (2019). Performance Evaluation on Green Supply Chain Management of Pasteurized Milk at Agro Niaga Jabung Cooperative. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, 8, 57–66. <https://doi.org/10.21776/ub.industria.2019.008.01.7>
- Purnomo, H., Kisanjani, A., Kurnia, W. I., & Suwanto, S. (2019). Performance Measurement of Green Supply Chain Management in the Yogyakarta Leather Tanning Industry. *Scientific Journal of Industrial Engineering*, 18(2), 161–169. <https://doi.org/10.23917/jiti.v18i2.8535>
- Rao, P., & Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? *International Journal of Operations & Production Management*, 25(9), 898–916. <https://doi.org/10.1108/01443570510613956>
- Regina, R. A. T., & Hasnawati, H. (2022). THE INFLUENCE OF GREEN SUPPLY CHAIN AND TECHNOLOGICAL INNOVATION ON OPERATIONAL PERFORMANCE. *Trisakti Economic Journal*, 2(2), 1813–1824. <https://doi.org/10.25105/jet.v2i2.14870>
- Rohdayatin, A., Sugito, P., Handayani, K., Ekonomi dan Bisnis, F., & Merdeka Malang, U. (2018b). *Green Supply Chain: A Study of its Relationship with Environmental Performance and Financial Performance*.
- Sayyadi Tooranloo, H., Alavi, M., & Saghafi, S. (2018). Evaluating indicators of the agility of the green supply chain. *Competitiveness Review*, 28(5), 541–563. <https://doi.org/10.1108/CR-01-2017-0009>
- Simbolon, F. (n.d.). *COMPARISON OF COMPANY PERFORMANCE MEASUREMENT SYSTEMS*.
- Yang, W., & Zhang, Y. (2012). Research on factors of green purchasing practices of Chinese. *E3 Journal of Business Management and Economics*, 3(5), 222–231. <http://www.e3journals.org>
- Zhang, X., & Yousaf, H. M. A. U. (2020). Green supply chain coordination considering government intervention, green investment, and customer green preferences in the petroleum industry. *Journal of Cleaner Production*, 246. <https://doi.org/10.1016/j.jclepro.2019.118984>